

LPKF ProtoMat® S62

New generation of advanced circuit board plotters

- Superior milling speed, resolution and accuracy
- Automatic tool change for unmatched ease-of-use
- Vacuum table and fiducial recognition available

LPKF ProtoMat® S62 The new standard for in-house prototyping

The LPKF ProtoMat® S62 introduces a new era of state-of-the-art circuit board plotters for in-house rapid PCB prototyping. This compact high-speed plotter provides unequalled precision and performance for quickly and easily milling and drilling circuit board prototypes in a single day.

In-house PCB prototyping gets your designs to market faster by eliminating production delays and high costs that can occur with outside vendors. It also makes your design data secure by keeping it in-house and under your control.

Precision and speed

The ProtoMat® S62 delivers unmatched precision with system resolution as fine as 0.25 μm (0.01 mils). Each system is carefully calibrated at the factory for unsurpassed overall accuracy. As a result, the plotter can mill and drill all types of PCBs with extremely fine traces, including RF and microwave boards. Its milling head travel speed of 150 mm (6") per second and high-performance 62,000 RPM spindle motor makes it a premiere high-speed performer for producing quality PCBs in-house.

Convenience and easy handling

Rich features and simple, automatic operation makes the ProtoMat® S62 easy to use. No external compressed air is needed, so just plug it in and you'll be completing your boards in minutes. A standard USB cable is easily connecting the plotter to a computer.

Automatic tool change

Its advanced features includes a 10-position tool changer that automatically replaces milling and drilling tools while the board is being produced. So manual setup time is minimized and the plotter can be operated unattended.

Integrated head lighting

Shadow-free illumination of the milling area from integrated head lighting makes direct quality control faster and easier.

Silence and security

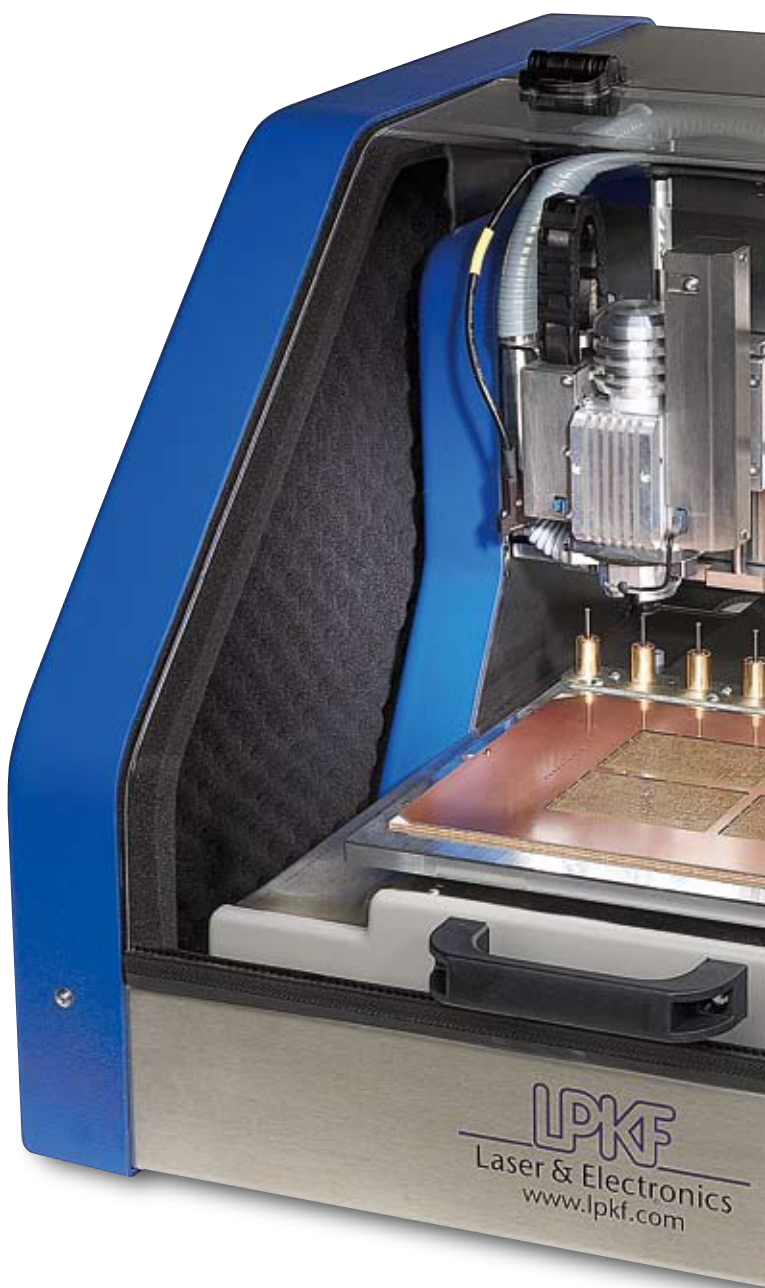
An integrated acoustic cabinet reduces system sounds and is a protective cover, so the plotter can safely operate in any work environment.

CAM software included

Each plotter comes with comprehensive LPKF CircuitCAM and BoardMaster software for importing PCB data from any CAD package and for controlling the operation of the plotter. This easy-to-use software is developed by LPKF, and it processes the same data that would be sent to a PCB manufacturer.

Three-dimensional operation

With its unique motorized Z-axis drive, the ProtoMat® S62 is ideal for machining instrument front panels and housings, as well as pockets in microwave boards. It can also mill around mounted PCB components, simplifying board rework and dpanelization jobs.



Optional Accessories

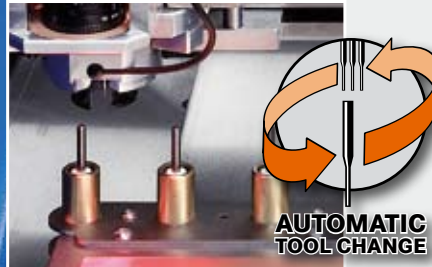
Each can be conveniently retrofitted on-site!



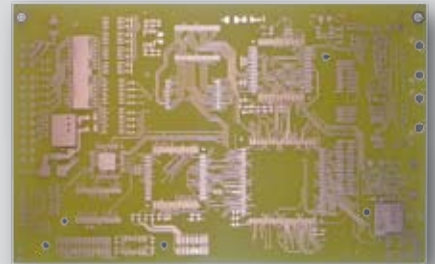
Integrated vacuum table top
Holds the board material securely in place and maintains perfect flatness.



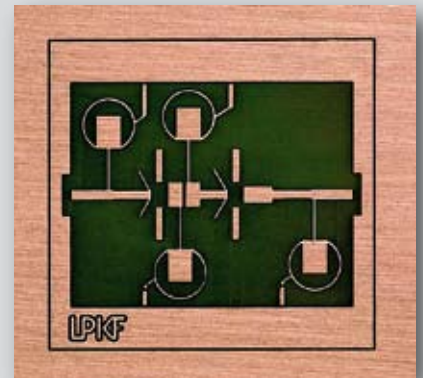
Fiducial recognition camera system
Front-to-back and multilayer alignment is automated by locating fiducials embedded in the board layers. The PCB can be remounted or flipped and it will always be properly aligned. It automatically inspects the status of the drill bits.



Applications



Single-sided, double-sided and multilayer mixed-signal boards



RF and microwave boards



Aluminum housing



Plastic housing

Technical Data LPKF ProtoMat® S62

Minimum track width	0.1 mm (4 mils)
Minimum isolation width	0.1 mm (4 mils)
Minimum drill hole diameter	0.15 mm (6 mils)
Working area (X/Y/Z)	229 mm x 305 mm x 38 mm (9" x 12" x 1.5")
Resolution (X/Y)	0.25 µm (0.01 mil)
Resolution (Z)	0.5 µm (0.02 mil)
Milling motor rpm	62,000 rpm
Tool change	automatic, 10 positions
Tool collet	1/8"
Drilling speed	150 holes per minute
Travel speed (max)	150 mm per second (6" per second)
X/Y positioning system	3-phase stepper motors
Z drive	stepper motor
Dimensions (W/H/D)	650 mm x 510 mm x 800 mm (25.6" x 21" x 31.5")
Weight	55 kg (121 lb)
Power supply	120/240 V, 50-60 Hz/200 VA
Hardware and software specifications	Microsoft® Windows® 2000/XP, 700 MHz processor or higher, min. 256 MB RAM (512 MB recommended), screen resolution min. 1024 x 768 pixels, USB 2.0

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